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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,238	07/22/2003	Stefan Zimmer	HAWE-51-107	7560

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EXAMINER

COLE, LAURA C

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 09/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/624,238

Applicant(s)

ZIMMER, STEFAN

Examiner

Laura C Cole

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 July 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 07222003, 01302004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description: "1" (Figures 2, 5, and 6). Corrected drawing sheets, or amendment to the specification to add the reference character(s) in the description, are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference character(s) mentioned in the description: bristles (7), see Page 3 Line 27 and Page 4 Line 28. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing

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figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

3. The drawings are objected to because in Figure 3 reference numeral "2" is used twice, pointing to both a "fastening portion" and near the bristle field. Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. The

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replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

5. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The specification does not disclose a material that the bristles are made of, specifically that they are made of a thermally resistant synthetic material such as aramide fibers, KEVLAR®, or PEEK® (Claim 4).

6. The use of the trademarks KEVLAR® and PEEK® has been noted in this application. It should be capitalized wherever it appears and be accompanied by the generic terminology.

Although the use of trademarks is permissible in patent applications, the proprietary nature of the marks should be respected and every effort made to prevent their use in any manner which might adversely affect their validity as trademarks.

Claim Objections

7. Claims 2 and 3 are objected to because of the following informalities:

In claim 2, it is somewhat unclear as to what is meant by "the bristles are arranged in a crown."

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In claim 3, it is unclear what is meant by "the bristle field extends over the entire surface *essentially*".

In claim 6, it is unclear and indefinite as to what is meant by "and/or".

Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

8. Claims 4 and 6-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 4, the phrase "such as" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

See MPEP § 2173.05(d).

Claim 4 contains the trademark/trade name KEVLAR® and PEEK®. Where a trademark or trade name is used in a claim as a limitation to identify or describe a particular material or product, the claim does not comply with the requirements of 35 U.S.C. 112, second paragraph. See *Ex parte Simpson*, 218 USPQ 1020 (Bd. App. 1982). The claim scope is uncertain since the trademark or trade name cannot be used properly to identify any particular material or product. A trademark or trade name is used to identify a source of goods, and not the goods themselves. Thus, a trademark or trade name does not identify or describe the goods associated with the trademark or trade name. In the present case, the trademark/trade name is used to identify/describe

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an aramid(e), aromatic polyamid(e), more specifically poly-paraphenylene terephthalamide (these three can all generically describe KEVLAR®) and polyetheretherketone (PEEK®) and, accordingly, the identification/description are indefinite.

Claims 6-8 provide for the use of the brush, but, since the claim does not set forth any steps involved in the method/process, it is unclear what method/process applicant is intending to encompass. A claim is indefinite where it merely recites a use without any active, positive steps delimiting how this use is actually practiced.

Claims 6-8 are rejected under 35 U.S.C. 101 because the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process, i.e., results in a claim which is not a proper process claim under 35 U.S.C. 101. See for example *Ex parte Dunki*, 153 USPQ 678 (Bd.App. 1967) and *Clinical Products, Ltd. v. Brenner*, 255 F. Supp. 131, 149 USPQ 475 (D.D.C. 1966).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

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9. Claims 1-3 and 6-7 are rejected under 35 U.S.C. 102(e) as being anticipated by Metwally, USPN 6,490,747.

Metwally discloses the claimed invention including a dental brush comprising a bristle field (25) wherein the length of the bristles of the field decrease from the external radius of the field to its center (see Figure 3). The bristles are arranged in a "crown" (see all Figures). The bristle field extends over the entire surface essentially (see Figures 3 and 4), the toothbrush is inherently used for brushing/cleaning teeth with or without fillings (as it is a "toothbrush", toothbrush defined as "A brush used for cleaning teeth" by *The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.*)

10. Claims 1-3 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Fischer et al., USPN 6,092,252.

Fischer et al. disclose the claimed invention including a dental brush comprising a bristle field (12) wherein the length of the bristles of the field decrease from the external radius of the field to its center (see Figures 1-6). The bristles are arranged in a "crown" (see all Figures, Column 2 Lines 16-17). The bristle field extends over the entire surface essentially (see all Figures), the toothbrush is inherently used for brushing/cleaning teeth with or without fillings (as it is a "toothbrush", toothbrush defined as "A brush used for cleaning teeth" by *The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.*)

11. Claims 1-3 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith et al., USPN 5,996,157.

Smith et al. disclose the claimed invention including a dental brush comprising a bristle field (see bristles of Figure 7) wherein the length of the bristles of the field decrease from the external radius of the field to its center (see Figure 7). The bristles are arranged in a "crown" (see Figure 7). The bristle field extends over the entire surface essentially (see all Figure 7), the toothbrush is inherently used for brushing/cleaning teeth with or without fillings (as it is a "toothbrush", toothbrush defined as "A brush used for cleaning teeth" by *The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.*)

12. Claims 1-3 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Hoffman, USPN 1,890,943.

Hoffman discloses the claimed invention including a dental brush comprising a bristle field (18) wherein the length of the bristles of the field decrease from the external radius of the field to its center (see Figure 3; Page 1 Lines 88-91). The bristles are arranged in a "crown" (see Figures 1 and 3). The bristle field extends over the entire surface essentially (see Figure 3), the toothbrush is inherently used for brushing/cleaning teeth with or without fillings (as it is a "toothbrush", toothbrush defined as "A brush used for cleaning teeth" by *The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.*)

13. Claims 1-2 and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Hadden, USPN 2,161,349.

Hadden discloses the claimed invention including a dental brush comprising a bristle field (6 and 7; Column 2 Lines 6-12) wherein the length of the bristles of the field

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decrease from the external radius of the field to its center (see Figures; Column 2 Lines 6-12). The bristle field extends over the entire surface essentially (see all Figures), the toothbrush is inherently used for brushing/cleaning teeth with or without fillings (as it is a "toothbrush", toothbrush defined as "A brush used for cleaning teeth" by *The American Heritage® Dictionary of the English Language, Fourth Edition Copyright © 2000 by Houghton Mifflin Company.*)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

14. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al., USPN 6,092,252 in view of Bachmann et al., US 2001/0016308.

Fischer et al. discloses all elements above, however does not include a specific bristle material.

Bachmann et al. disclose a teeth polishing device that comprise a fiber that is an aramide fiber such as KEVLAR® (Paragraph 29) including abrasives (Paragraphs 23-24) for polishing teeth (see also Paragraph 31). It is also noted that this device is used for polishing of teeth and fillings (title).

It would have been obvious for one of ordinary skill in the art to modify the bristle fibers of Fischer et al. to comprise an aramide fiber and abrasives, as Bachmann et al. teach, since these materials are advantageous in polishing teeth and fillings.

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15. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fischer et al., USPN 6,092,252 in view of Masterman et al., USPN 5,722,106.

Fischer et al. discloses all elements above, however does not include a specific bristle material.

Masterman et al. disclose a tooth polishing device that comprises a polyamide fiber (Column 5 Lines 37-50) and can be used with a toothpaste (Column 2 Lines 45-47).

It would have been obvious for one of ordinary skill in the art to modify the bristles of Fischer et al. to comprise a polyamide, as Masterman et al. teach, since a polyamide is a suitable material for polishing teeth using a paste.

Conclusion

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Laura C Cole whose telephone number is (571) 272-1272. The examiner can normally be reached on Monday-Thursday, 7:30am - 5pm, alternating Fridays.

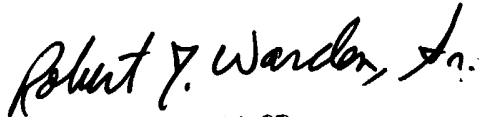
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J Warden can be reached on (571) 272-1281. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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02 September 2004


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